

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

APPLICANT(S): Bobby Jose
APPLICATION NO.: 10/700,342
FILING DATE: November 3, 2003
TITLE: SIGNAL COMMUNICATION COORDINATION
EXAMINER: Ho, Chuong T.
GROUP ART UNIT: 2619
ATTY. DKT. NO.: 29988/00005

FILED VIA EFS

MAIL STOP MISSING PARTS
COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

AMENDMENT

SIR:

In response to the Office Action of April 3, 2008, please consider the following amendments and remarks.

Listing of Claims begin on page 2 of this paper.

Election/Restrictions begin on page 8 of this paper.

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims:

Claims 1-8 (Withdrawn)

9. (Original) An access station for wireless communications, the access station comprising:

a wireless input/output (I/O) unit that is configured to establish a plurality of access points; and

signal transmission/reception coordination logic that is capable of ascertaining that an access point of the plurality of access points is receiving a signal and that is adapted to restrain at least one other access point of the plurality of access points from transmitting another signal responsive to the ascertaining that the access point is receiving the signal.

10. (Original) The access station as recited in claim 9, wherein the plurality of access points established by the wireless I/O unit are co-located.

11. (Original) The access station as recited in claim 9, wherein the wireless I/O unit operates in accordance with at least one IEEE 802.11 standard.

12. (Original) The access station as recited in claim 9, wherein the signal received by the access point comprises at least one up linked packet.

13. (Original) The access station as recited in claim 9, wherein the signal received by the access point comprises at least a portion of an uplinked packet.

14. (Original) The access station as recited in claim 13, wherein the at least a portion of the uplinked packet comprises at least part of a preamble of the up linked packet.

15. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic is further adapted to restrain at least two other access

points of the plurality of access points from transmitting signals responsive to the ascertaining that the access point of the plurality of access points is receiving the signal.

16. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic is further adapted to restrain the at least one other access point of the plurality of access points from transmitting a downlink signal responsive to the ascertaining that the access point of the plurality of access points is receiving the signal.

17. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic is further adapted to restrain the at least one other access point of the plurality of access points from transmitting the other signal on a first channel responsive to the ascertaining that the access point of the plurality of access points is receiving the signal on a second different channel.

18. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic is further capable of monitoring the plurality of access points.

19. (Original) The access station as recited in claim 18, wherein the signal transmission/reception coordination logic is capable of monitoring the plurality of access points to detect received signals.

20. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic is further adapted to restrain the at least one other access point of the plurality of access points while the access point is receiving the signal.

21. (Original) The access station as recited in claim 9, wherein each access point of the plurality of access points corresponds to a communication beam of a plurality of communication beams that emanate from the access station.

22. (Original) The access station as recited in claim 9, wherein each access point of the plurality of access points is associated with a medium access controller/baseband unit pair.

23. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic comprises medium access controller coordination logic.

24. (Original) The access station as recited in claim 23, wherein the medium access controller coordination logic is physically distributed to link two or more access stations.

25. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic operates at a baseband level.

26. (Original) The access station as recited in claim 9, wherein the signal transmission/reception coordination logic operates at a radio frequency (RF) level.

Claims 27-34 (Withdrawn)

35. (Original) An apparatus comprising:

a plurality of inputs adapted to accept a plurality of receive indicators;
logic capable of combining the plurality of receive indicators to produce a plurality of constructive receive indicators; and
a plurality of outputs adapted to provide the plurality of constructive receive indicators.

36. (Original) The apparatus as recited in claim 35, wherein the apparatus comprises a multi-media access controller (MAC) controller (MMC).

37. (Original) The apparatus as recited in claim 35, wherein both the plurality of inputs and the plurality of outputs number three, six, or thirteen.

38. (Original) The apparatus as recited in claim 35, wherein the logic comprises at least one "OR" gate.

39. (Original) The apparatus as recited in claim 35, wherein the logic comprises at least one of hardware, software, and firmware.

40. (Original) The apparatus as recited in claim 35, wherein the logic is adapted to segment the plurality of receive indicators using a channel mapping prior to producing the

plurality of constructive receive indicators, the plurality of constructive receive indicators thereby being segmented by the channel mapping.

41. (Original) The apparatus as recited in claim 35, wherein the logic includes at least one timing function that activates when a receive indicator of the plurality of receive indicators affirmatively indicates that a signal is being received.

42. (Original) The apparatus as recited in claim 35, further comprising:
another plurality of inputs adapted to accept receive-indicator enable information that stipulates which receive indicators of the plurality of receive indicators are to be combined by the logic to produce the plurality of constructive receive indicators.

43. (Original) The apparatus as recited in claim 35, wherein the plurality of inputs are further adapted to accept the plurality of receive indicators from a plurality of baseband units.

44. (Original) The apparatus as recited in claim 35, wherein the plurality of outputs are further adapted to provide the plurality of constructive receive indicators to a plurality of medium access controllers.

Claims 45-102 (Withdrawn)

103. (Original) An apparatus comprising:

signal transmission/reception coordination logic that accepts as inputs receive information for a plurality of access points and produces as outputs combined receive information, the signal transmission/reception coordination logic adapted to combine the receive information according to at least one coordination function and responsive to one or more selectivity factors.

104. (Original) The apparatus as recited in claim 103, wherein the one or more selectivity factors include channel selectivity.

105. (Original) The apparatus as recited in claim 103, wherein the one or more selectivity factors include overlapping subnet selectivity.

106. (Original) The apparatus as recited in claim 103, wherein the one or more selectivity factors include packet-content-based selectivity.

107. (Original) An access station for wireless communications In a wireless system, the access station comprising:

a wireless input/output (I/O) unit that is configured to establish a plurality of access points; and

signal transmission/reception coordination logic that is capable of ascertaining that a first access point of the plurality of access points is receiving a first signal on a first channel and that is adapted to restrain a second access point of the plurality of access points from transmitting a second signal on a second channel based on the ascertaining that the first access point is receiving the first signal with an ongoing transmission on a third channel to prevent distortion to other signals being wirelessly communicated in the wireless system.

108. (Original) The access station as recited in claim 107, wherein the prevented distortion comprises inter-modulation distortion.

109. (Original) An access station for wireless communications In a wireless system, the access station comprising:

a wireless input/output (I/O) unit that is configured to establish at least one access point; and

signal transmission/reception coordination logic that is capable of restraining transmission from the at least one access point when another access point is expecting a short-term response to a frame that was transmitted by the other access point.

110. (Original) The access station as recited in claim 109, wherein the short-term response to the frame comprises an immediate response to the frame.

111. (Original) The access station as recited in claim 109, wherein the other access point is also established by the wireless I/O unit of the access station.

112. (Original) The access station as recited in claim 109, wherein the other access point is established by a different access station.

113. (Original) The access station as recited in claim 109, wherein the at least one access point and the other access point are operating on a same channel.

114. (Original) The access station as recited in claim 109, wherein the at least one access point and the other access point are operating on different channels.

115. (Original) The access station as recited in claim 114, wherein the different channels are adjacent.

Remarks/Arguments:

Election/Restrictions

In the Office Action, restriction was required, under 35 U.S.C. 121, to restrict the application to one of the following identified inventions:

I. Claims 27-34, 89-102, drawn to having a plurality of contiguous regions served by respective fixed stations, classified in class 370, subclass 338.

II. Claims 1-8 and 45-88 drawn to arbitration for access to a channel, in priority solution classified in class 370, subclass 462, 455.

III. Claims 9-26, 35-44 and 103-115, drawn to using multiple antenna at a station, classified in class 370, subclass 334.

Applicant elects Invention III, without traverse. The elected claims include Claims 9-26, 35-44 and 103-115.

By this election, Claims 1-8, 27-34 and 45-102, are withdrawn from consideration. Applicant expressly reserves the right to pursue these claims and limitations of those claims, in claims of this application in further prosecution or in additional applications filed by the Applicant.

CONCLUSION

In light of the above remarks, Applicant believes that the application, as amended, is in condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to allowance.

This response is being filed with a fee and an extension of time to reply to the Office Action for 3 months, as well as a petition to revive an unintentionally abandoned application, and the fee appropriate thereto. Applicant authorizes any required fees requested to be charged to Deposit Account 50-1577.

If the Examiner has any questions regarding this communication, he is invited to contact the undersigned at (916) 930-2585.

Date: October 29, 2009

Bullivant Houser Bailey PC
1415 L Street, Suite 1000
Sacramento, California 95814
Tel.: (916) 930-2585
Fax: (916) 930-2501

Respectfully submitted,

By:

Carl J. Schwedler, Reg. No.: 36,924

11525558.1